

COMPREHENSIVE MANAGEMENT OF TYPE 2 DIABETES MELLITUS PATIENTS STUDY 2006

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of the requirements for the degree of Master of Medicine in the
branch of Internal Medicine.

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DECLARATION

I, Anna Maria Klisiewicz declare that this research report is my own work. It is being submitted for the degree of Master of Medicine in the branch of Internal Medicine in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

.....*Anna Maria Klisiewicz*.....(Signature of candidate)

.....*3rd*.....day of.....*AUGUST*.....(month), 2007...

DEDICATION

I would like to dedicate this work to my parents Dr Marlena and Dr Roman Klisiewicz and my nephews Roman and Robert Klisiewicz.

PUBLICATIONS AND PRESENTATIONS

This research report has not yet been published but has been presented at the 2007 Bloemfontein, SEMDSA Endocrinology Congress.

ABSTRACT

The Society for Endocrinology, Metabolism and Diabetes of South Africa (SEMDSA) estimates the prevalence of Type 2 Diabetes Mellitus in South Africa to be approximately 13% in the Indian, 3% in the European and 4.8-8% in the African population group. Morbidity from diabetes is a consequence of both macrovascular and microvascular disease. Over the last decade, a fundamental transformation of the principles of management of type 2 diabetes has occurred. This was driven by a large number of multicentre randomized clinical trials documenting improved outcomes associated not only with glycaemic control, but also with use of antihypertensive, lipid lowering and anti-platelet therapy.

The objective of this research report was to 'revisit' our diabetes clinics to ascertain how many diabetic patients are reaching the lipid, blood pressure, body mass index, waist circumference and glucose targets as recommended by the SEMDSA guidelines and to ascertain if there has been any improvement since a previous study conducted a decade ago.

Study design included a sample of 150 patients. Body mass indices (BMI), fasting lipograms, glycated haemoglobin (HbA1c), waist measurements and blood pressure were determined in patients with type 2 diabetes mellitus who were on oral agents or insulin (Protaphane), or a combination thereof, and who were age 35 years or older.

Results showed that, out of the 150 patients, 98 were females and 52 were males. Black patients constituted 68%, White 12,7%, Indian 10,7% and Coloured 8,7%. The mean age was 59 years. The mean HbA1c was 8,7% with HbA1c being more than 8% in 83 patients (55%). Obesity was present in 37,3% of the patients; it was class I (BMI 30-34,9 kg/m²) in 22%, class II (BMI 35-39,9) in 10% and class III (BMI >40) in 5,3%. Hypercholesterolaemia (total cholesterol > 5,0 mmol/l) was present in 29,3%, hypertriglyceridaemia (total triglycerides > 1,5 mmol/l) in 45,3% of the patients. Waist circumference was greater or equal than 80cm in 98% of the females and greater or equal than 94cm in 69% of males. In the whole cohort of 150 patients, 127 were hypertensive (84,67%). 78,74% of patients with hypertension had systolic blood pressure above or equal to 130 mmHg and 59,84% had diastolic blood pressure above or equal to 80 mmHg. Out of the 150 patients, 43% did not engage in regular exercise, 6% smoked cigarettes and 51% were on aspirin.

In conclusion these findings are similar to those from a previous study conducted in 1996 and show little improvement in the holistic care of patients with type 2 diabetes.

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